



Perkasie TCE Assessment Bucks County, Pennsylvania

SUB-SLAB SAMPLING BEGINS! – EPA LOOKS FOR VAPORS IN SOIL –



U.S. Environmental Protection Agency - Region 3

March 2004

The Perkasie TCE assessment...

The U.S. Environmental Protection Agency (EPA) will collect soil-vapor samples in Perkasie, Pennsylvania. Due to past industrial activities in the area, EPA is testing for vapors from trichloroethylene (TCE), which was a commonly used solvent. The soil-vapor testing will help find out:

- ✓ If there is TCE-contaminated soil-vapor present in residential areas.
- ✓ Where, how much, and at what concentrations TCE contaminated soil-vapor exists?
- ✓ If there is TCE-contaminated soil-vapor present, is it getting into homes? And most importantly...
- ✓ If there is a risk to human health and the environment.

EPA will work together with the Agency for Toxic Substances and Disease Registry (ATSDR) during this investigation.



Background...

In November 2003, EPA contractors collected approximately 60 samples as part of a preliminary assessment in the Perkasie area. The assessment results showed that there is TCE-contaminated soil-vapor in the Perkasie area and further investigation is needed.

EPA will conduct a detailed study into the possibility of residential vapor intrusion, beginning mid-March.

What you may notice...

Workers will be in residential areas taking soil-vapor samples. They will be using some heavy equipment and may be wearing protective work gear, such as hardhats, safety glasses and latex gloves.

Workers will be collecting sub-slab soil-vapor samples. This means that vapor samples will be collected from underneath the cement slabs of houses. Samples will be taken from an angle so the soil directly beneath a home can be reached at depth, without disturbing the house.

◀ Photo example of Geoprobe™ soil-vapor sampling equipment.

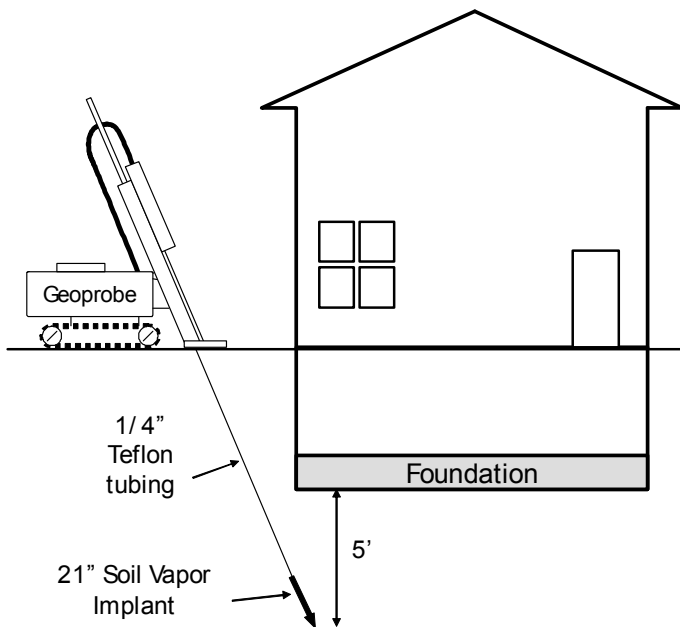


◀ Photo example of Geoprobe™ soil-vapor sampling.

The Sampling Process...

- ✓ “Direct-push hole drilling” means no soil will be removed.
- ✓ A 21-inch rod, or “implant” will be installed at an angle beneath the cement slab of a house.
- ✓ The hole will measure about one inch in diameter and up to 10 feet in depth.
- ✓ If the soil does not allow the implant to be inserted at an angle, for example in the case of bedrock or groundwater obstruction, then a sample will be collected straight down, near the cement slab of a house.
- ✓ Once the soil-vapor implant is installed, the hole will be secured and covered by a steel, flush-mounted protective casing, measuring about four inches in diameter.
- ✓ Once the implant is inserted and the soil given a chance to stabilize, the soil-vapor sample will be collected.

EPA may temporarily keep the sampling location available for future sampling, if needed.



◀ Photo example of steel, flush-mounted protective casing.

Schedule...

Work for this sampling phase will last around two weeks, however data results will take longer. All results must go through a process of quality assurance and quality controls (QAQC), to help ensure accuracy, which can take up to 30 days. When the sample collection is finished, and the data results are completed, EPA will sit down with property owners to discuss their results before announcing the overall findings to the community.

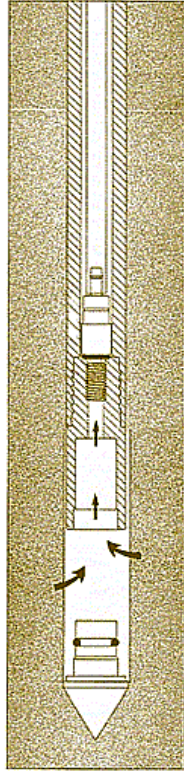


Diagram example of soil-vapor drawn (arrows) through the inner tubing system and sealed in a container. The container is sent to a lab for analysis.

What is TCE, and how can people be affected by it...

TCE is:

- ✓ A nonflammable, colorless liquid
- ✓ Is used mainly as a solvent to remove grease from metal parts
- ✓ An ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers

TCE can enter the body by:

- ✓ Breathing in TCE vapors from contaminated soil and/or water
- ✓ By drinking, swimming or showering in TCE-contaminated water
- ✓ By skin contact, while manufacturing TCE products or using them at work to wash paint or grease from skin or equipment

For More Information...

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